Breaststroke Swimming Turns Checklist

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There are two general classifications of turns: the open turn and the flip turn, or tumble turn. The use of a particular type of turn, and the accompanying period of time in which the swimmer may remain underwater (in a desirable hydrodynamic position) after the completion of the turn, are specified in the rules of the sport as determined by FINA.

Open turns involve touching the wall with the hand(s), then reversing direction – the swimmer will probably get a breath of air during the turn. Flip turns involve a summersault as they approach the wall; the swimmer would normally only touch the wall with the feet as they push off.

Flip Turn
The flip turn is an important component of freestyle swimming, and can also be used in breaststroke. The turn is intended to permit a coordinated change of direction that allows the swimmers to maintain both their speed and the cadence of their stroke. A flip turn begins with a somersault, with the swimmers bringing their arms forward to create a long, slender upper body profile. As the upper body is being extended, the swimmers use the wall of the pool to push as powerfully as possible. In this position, the swimmers will often remain under the surface, propelling their body with an efficient dolphin kick (legs together, moving in the manner of a dolphin). The distance in which the swimmers are permitted to remain underwater after a flip turn is also regulated in each swimming discipline.

**How to Do a Breaststroke Flip turn**
1. Finish your latest pool length by swimming towards the pool’s wall until you are about an arm’s length from it.
2. Immediately go into a forward somersault.
3. Instead of completing the somersault full circle, begin to come out of it about halfway through, while you are facing in the opposite direction of the wall.
4. Push your feet against the wall, propelling yourself away from the wall and forward underwater.
5. Break onto the water’s surface as you gracefully execute your next arm stroke in the breaststroke.
Breaststroke Turn

1. Time the last stroke to allow the body to be fully stretched upon reaching the wall (Fig. 5-16, A).
2. After both hands touch the wall simultaneously, dip the shoulder on the side to which the turn will occur. The example here starts with dipping the left shoulder to turn left. Tuck the hips and legs tight as they continue to move toward the wall (Fig. 5-16, B).
3. As the hands touch the wall, turn the head to the left shoulder. Bend the left elbow and move the left arm backward as close as possible to the body (Fig. 5-16, C).
4. When the legs pass under the body, move the right arm over the head, keeping it close to the head. Plant both feet on the wall with toes pointing toward the side, knees bent.
5. Take a deep breath before the head submerges. Extend the arms into a streamlined position while pushing off with the body somewhat on its side (Fig. 5-16, D).
6. Rotate to a face-down position while gliding about 1 to 2 feet below the surface.
7. Before losing too much speed, take a complete underwater breaststroke pull to the thighs, glide again and then kick upward as the hands recover close to the body (Fig. 5-16, E-G). Surface to resume stroking.

To turn to the right, simply reverse these directions.

Figure 1. Steps in the open breaststroke turn.
**Open Turn**

Open turns are generally the easiest to perform - although doing them smooth and fast requires a lot of practice, just like everything else. The rough version: move towards the wall on your stomach, touch the wall with your hand(s), twist and roll onto your side while swinging your legs up to the wall, push off on your side, then roll towards your stomach as your feet leave the wall.

The open turn is also used to preserve speed and form. In an open turn, the swimmers seek to coordinate their approach to the wall and the stroke rhythm; the swimmers use one hand to effect a push off from the wall, while bringing their feet and legs into a tuck position. The swimmers push off from the wall, with the entire body under the surface, extending from the tuck into a streamlined body position, from which they resume their stroke.

**Steps in performing an open turn**

http://swimming.about.com/cs/techniquetips/a/open_turn_basic_2.htm

1. Approach the wall without slowing down.
2. Touch the wall with both your hands.

![Figure 2. Maintain speed into wall and extend arms forward.](image-url)

3. Begin to pull yourself into a tuck, knees moving up towards your chest.
4. Look at your hands on the wall (you can begin to take a breath here).
5. Pull one hand underwater and away from the wall. Usually the left hand if you are turning to the left.

![Figure 3. Drop the left shoulder to turn left, knees should come up.](image)

6. Move that left elbow underwater towards the hip on the same side while still looking at the other hand left on the wall (helps prevent over twisting).
7. Twist onto your side as that underwater hand swings out (still keep your eyes on your hand on the wall to prevent over twisting) - this requires you to rotate along your spine and tip your hips towards the wall.
8. Continue to pull your knees towards your chest, aim them toward the shoulder attached to the hand moving underwater (this helps you rotate onto your side later).
9. Swing and extend the hand going underwater out and around, still underwater, to point the direction you want to go now (where you just came from).
10. As your feet approach the wall (when you pull your knees up, your feet
better follow!), move the second hand off of the wall and towards your eyes, above water.

Figure 4. Plant feet on the wall and tip away from the wall with the upper body.

11. Plant your feet on the wall side by side, toes pointing sideways or upwards (at about 45 degrees).

12. You should be on your side and tipping away from the wall with your upper body.

13. Keeping your head turned (chin on your shoulder) and looking towards the wall (or up towards the ceiling as you follow your hand) as long as possible to help prevent over twisting, move the above water hand into the water just above your head and extend it to meet the underwater hand.
Figure 5. Pull the knees to the chest, continue to rotate them towards the wall.

Figure 5. Plant both feet on the wall with a 45° angle, flex legs, keep eyes facing the end.
The underwater pull for the breaststroke turn differs from the usual pull because the hands and arms pull all the way past the hips and the hands recover close to the body. This is called a pullout. In competition, one pullout is allowed at the beginning of each length, and then the head must surface. The entire breaststroke turn and underwater pull are illustrated in Figure 5-17, A-G.

Figure 5. Open breaststroke turn with underwater pull down.
Figure 6. Head is turned toward the left shoulder while legs are pushing off wall.

14. Lock the hands together, one on top of the other.
15. Your tipping should have brought you underwater, lying on your side, feet on the wall, hands and arms extended in a streamlined position.
16. Extend your legs and push off the wall on your side.
17. As your feet leave the wall, make sure you are rotated so your belly is more towards the bottom of the pool than the surface (this keeps you legal).

A common part of all turns is the streamline

To maximize your push off of the wall, remember to streamline.
• Extend your hands over your head, pointing the direction you want to go, placing one hand on top of the other and wrapping your upper hand's pinky and thumb around your lower hand.
• Stretch from your fingertips, through your body, down to your toes.
• Make your body as long and as skinny as possible.
• Your arms should be snug against the back of your head, biceps behind your ears, with a smooth (well, relatively smooth) surface from the back of your hands to the tips of your toes.
Maintain a streamline as long as you are moving faster than you can swim -
just before you slow down, you will begin the "breakout" or transition from the streamline to swimming. Details later; for backstroke, butterfly, and freestyle, you begin to kick first, then add arms as you surface, then take a breath after completing a few strokes. Breaststroke is a pull first (full pull, with the hands finishing by your hips), then the hands recover back to a streamline, followed by a kick, then into your normal stroke as you surface.

![Swimmer extending arms and accelerating into the wall.](http://www.usms.org/articles/articledisplay.php?a=97)

**Figure 7.** Swimmer will extend arms and accelerate into the wall.

**Open Turn - the Approach**

http://www.usms.org/articles/articledisplay.php?a=97

**THE APPROACH**

The first rule to remember for the breaststroke turn is to always kick into the wall. Often, breaststrokers are lazy and pull into the wall. This causes two
problems: First, it's impossible to continue the momentum with just a pull, and second, pulling alone causes the hips to sink, making it difficult to begin the turn. Always look at the wall 3-4 strokes from the end. The mind will amazingly adjust to the distance to the wall. The object is to kick into the wall, never pulling into it. Pulling in causes the hips to sink, just like putting out an anchor. By kicking into the wall you keep your speed up as well as your hips.

The key ingredient for success is to prepare early. Adjustments must be made at least three strokes from the wall, just as a long jumper must adjust his or her stride long before the actual jump is made. Of course, as fatigue sets in, the length of your stroke will shorten, making the process of always kicking into the wall a constantly changing proposition.

THE TURN

It is important to "hit the wall" at the apex of your stroke extension with maximum forward velocity. Think of the wall as a hot plate, forcing you to spend as little time as possible touching it. Your arms must act as springs so that you bounce off the wall, always remembering not to grab the gutter.

Simultaneous with hitting the wall, your heels are brought up to your buttocks and your knees are tucked under your body. The tighter the tuck and the more velocity you have going into the wall, the quicker the turn will be. As soon as the lower hand touches you quickly bring it back along the body and extend the palm out to assist in pulling your body into the other direction. Because we dipped our shoulder, we now throw our head straight back from our body position. We also bring the other hand up close to the body and then next to the ear where it will come together with the lower hand behind the head as we lunge the body away from the wall we just touched.

As your legs are brought directly under your body, your head and torso should lunge backward. Throw your head straight back so that you are looking directly upward, either at the sky or the ceiling. If you are looking into the gutter or to the side you are doing it incorrectly. The hand that recovers over the water should pass beside your ear and the arm that recovers under the surface should remain close to the body, slicing through the water like a knife. Continue to "fall back" until your feet are planted on the wall and your hands meet behind your head, preparing for the next phase of the turn.
THE PUSH OFF

Your feet should be firmly planted on the wall with your toes pointed upward at a line nearly parallel to the surface of the water. By now your feet will be planted on the wall, hopefully at about the same angle that you dipped your shoulder. About 45 degrees to the water surface should be good.

Be sure not to turn around onto your stomach before the push off because this requires a great deal of effort and creates a lot of resistance.

You might now be thinking, "But if I do this, I will push off on my back!" and more or less, that's true. You should turn over onto your stomach during the push off, not during the turn. This is commonly called a "corkscrew" and is completed as you are pushing off the wall in a streamlined position before the underwater pull-down begins. To be safe, all breaststroke swimmers should be aware of the turn rule that states "the shoulders must be at or past the vertical toward the breast when the feet leave the wall." As you push off be sure to keep the tightest streamline, narrowing the shoulders as you press the arms behind the head. Keep the body in an absolute straight line, as your body gradually becomes parallel to the water's surface. You should hold the push off for 3 to 3.5 seconds. You cannot swim as fast as you push off, hold it longer for the 200 than the 100 race. Try to hold one depth below the water surface during the push off and the following underwater pull-down. Many people go down, then up, traveling a longer distance and risking having to float up to the first full stroke. Have some one watch your push off, if you have any ripple at the waters surface you are too shallow, go deeper until there is no wake.

"Streamline" is the term used for an optimally hydrodynamic glide through the water. You want to preserve the velocity from the push off for as long as possible by locking one hand over the other and squeezing your arms against either side of your head. There is no quicker way to put on the brakes. And always remember, the three easiest ways to improve your turns are to streamline, streamline, and streamline.

THE UNDERWATER PULL-DOWN

After about three seconds the pull-down is essentially an explosive butterfly stroke with the hands going back to the legs, as provided for in the rule. There are two refinements to the pull-down, one to scull the hands quickly when past the waist, to provide a little more propulsion. Another is to pull the hands
between the legs and hunching the shoulders to make them more narrow at the end of the pull-down. Both refinements last for less than a second.

As you begin to slow down after your push off, your hands come apart from the streamlined position and do what is essentially an underwater butterfly stroke. Be explosive and concentrate on accelerating until your hands are at your thighs. Keep your head still and look directly toward the bottom of the pool to minimize turbulence.

After a brief pause, "creep" your hands up your body, paying special attention to causing as little resistance as possible. Begin the recovery of the kick while your arms slip past your torso. As your hands pass your head and extend in front of you, kick your legs, tilt your head forward, and powerfully pop up to the surface to begin your first stroke.

After the hunching of the shoulders, quickly bring the hands up the body to the streamline position. As the hands pass the chest, bring the heels up to the kick position. When the arms come together in the streamline, begin your kick to the surface. It has been proven the kick should be narrow to reduce water resistance, so it is very important to finish the kick. The heels should crash hard together.

"The head must break the surface of the water before the hands turn inward at the widest point of the second stroke". You can gain or lose one half a second on the first stroke alone! If you come up and immediately throw your head up to breath before the hands come inward, you can lose a second to your competitors. Ideally you pull hard near the water surface and just as the hands reach their widest point, the head will just break the water surface. Then you breathe late into the inward scull. You can GAIN .3 to .5 seconds on your competitors by correctly timing the second stroke. I don't even breathe on this first stroke, concentrating on the pull more and finally breathing on the second stroke.